

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for managing versions of a plurality of software components on a network, comprising:

detecting a version change to a first software component associated with a network device out of the plurality of the software components;

automatically identifying a second software component out of the plurality of the software components that needs to be changed to be compatible with the first software component, wherein the second software component depends on the first software component;

assessing the software dependencies and compatibilities of at least the first and second software components;

downloading upgrades of the first and second software components from a network device;

storing the upgrades of the first and second software components in a component cache; [[and]]

a version manager maintaining version information of the upgrades of the first and second software components;

checking the version information of the upgrades of the first and second software components stored in the component cache;

storing the version manager in the component cache.
- 2-4. (canceled)
5. (previously presented) The method as recited in Claim 1, further comprising:

collecting attributes of the second software component; and

automatically manipulating the second software component according to the attributes.

6. (previously presented) The method as recited in Claim 5, wherein the manipulating further includes:

downloading an upgrade of the second software component as part of performing an

instance of the method; and

replacing an existing version of the second software component with the upgrade of

the second software component that has been downloaded in the same instance.

7. (currently amended) A method for managing versions of a plurality of software components on a network, comprising:

detecting a version change to a first software component out of the plurality of the

software components;

automatically identifying a second software component out of the plurality of the

software components that needs to be changed to be compatible with the first

software component, wherein the second software component depends on the

first software component;

assessing the software dependencies and compatibilities of at least the first and second

upgrades of software components;

collecting attributes of the second software component; and

automatically manipulating the second software component according to the attributes,

wherein the manipulating step further comprises downloading a copy of an

upgrade of the second software component and storing it within a component

cache;

a version manager maintaining version information of upgrades of the first and second

software components;

storing the upgrades of the first and second software components in a component

cache; and

storing the version manager in the component cache.

8. (previously presented) The method as recited in Claim 7, wherein the downloading step further comprises:

downloading the upgrade of the second software component as part of performing an instance of the method; and

wherein the manipulating step further comprises replacing an existing version of the second software component with an upgrade of the second software component that has been downloaded in the same instance.

9. (cancelled)

10. (previously presented) The method as recited in Claim 7, further comprising:

checking version information of the upgrade of the second software component that is stored in the component cache to determine whether to perform the downloading step.

11. (currently amended) An apparatus for managing versions of a plurality of software components on a network, comprising:

a user interface; and

a processing engine, coupled to the user interface, wherein the processing engine further comprises:

an event manager that detects a version change to a first software component out of the plurality of the software components;

a component manager that in response obtains version information of first software component from a version manager and automatically identifies an upgrade to a second software component out of the plurality of the software components that needs to be changed to be

compatible with the first software component, wherein the second software component depends on the first software component;
wherein the component manager automatically downloads the upgrade of the second software component and stores a copy of the upgrade of the second software component in a component cache;
a version manager maintaining version information of the upgrade of the second software component;
checking the version information of the upgrade of the second software component stored in the component cache; and
storing the version manager in the component cache.

12. (cancelled)
13. (previously presented) The apparatus as recited in claim 11, wherein the component manager informs an operator of the apparatus of the upgrade of the second software component via the user interface.
14. (cancelled)
15. (previously presented) The apparatus as recited in Claim 11, wherein the component manager checks version information of the upgrade of the second software component that is stored in the cache to determine whether to download a copy of the upgrade of the second software component.
16. (previously presented) The apparatus as recited in Claim 11, wherein the processing engine further comprises:

a desktop manager, coupled to the component manager, wherein the desktop manager collects attributes of the second software component; and

manipulates the second software component according to the attributes.

17. (previously presented) The apparatus as recited in Claim 16, wherein the desktop manager manipulates the second software component by causing the component manager to
- download the copy of the upgrade version of the second software component as part of
- executing an instance of the processing engine; and
- replace an existing version of the second software component with the copy of the
- upgrade version of the second software component that has been downloaded
- in the same instance.
18. (currently amended) A computer-readable medium storing one or more sequences of instructions for managing a plurality of network devices on a network, which instructions, when executed by one or more processors, cause the one or more processors to:
- detect a version change to a first software component out of the plurality of the
- software components; and
- automatically identify a second software component out of the plurality of the software
- components that needs to be changed to be compatible with the first software
- component, wherein the second software component depends on the first
- software component;
- assess the software dependencies and compatibilities of at least the first and second
- upgrades of software components;
- download a copy of an upgrade of the second software component; and
- store a copy of the upgrade of the second software component in a component cache;
- a version manager maintaining version information of the upgrades of the first and
- second software components;
- checking the version information of the upgrades of the first and second software
- components stored in the component cache; and
- storing the version manager in the component cache.

19. (previously presented) The computer-readable medium as recited in Claim 18, further comprising instructions which, when executed by the one or more processors, cause the one or more processors to automatically download the copy of the upgrade of the second software component.
20. (cancelled)
21. (previously presented) The computer-readable medium as recited in Claim 19, further comprising instructions which, when executed by the one or more processors, cause the one or more processors to check version information of the copy of the upgrade of the second software component that is stored in the cache to determine whether to download the copy of the upgrade of the second software component.
22. (previously presented) The computer-readable medium as recited in Claim 18, further comprising instructions which, when executed by the one or more processors, cause the one or more processors to
- collect attributes of the second software component; and
- automatically manipulate the second software component according to the attributes.
23. (previously presented) The computer-readable medium as recited in Claim 22, further comprising instructions which, when executed by the one or more processors, cause the one or more processors to:
- download a copy of the upgrade of the second software component; and
- replace an existing version of the second software component with the upgrade of the
- second software component that has been downloaded.
24. (currently amended) An apparatus for managing versions of a plurality of software components on a network, comprising:
- a user interface means; and

a processing means, coupled to the user interface, wherein the processing means

further includes:

a detection means for detecting a version change to a first software component

out of the plurality of the software components; and

a component manager means, stored within a component cache, for assessing

the software dependencies and compatibilities for upgrades of the

plurality of software components;

a compatibility verification means for automatically identifying a second

software component out of the plurality of the software components

that needs to be changed to be compatible with the first software

component, wherein the second software component depends on the

first software component;

a version manager maintaining version information of the upgrade of the

second software component;

checking the version information of the upgrade of the second software

component stored in the component cache;

storing the version manager in the component cache.

25. (previously presented) The apparatus as recited in claim 24, wherein the compatibility verification means automatically downloads an upgrade of the second software component.
26. (previously presented) The apparatus as recited in claim 24, wherein the compatibility verification means informs an operator of the apparatus of the second software component via the user interface means.
27. (previously presented) The apparatus as recited in Claim 25, wherein the compatibility verification means stores a copy of a copy of the upgrade of the second software component in a component cache.
28. (previously presented) The apparatus as recited in Claim 27, wherein the compatibility verification means checks version information of the copy of the upgrade of the second software component that is stored in the component cache to determine whether to download the upgrade of the second software component.
29. (previously presented) The apparatus as recited in Claim 24, wherein the processing means further comprises:

a management means for collecting attributes of the second software component; and

manipulating the second software component according to the attributes.
30. (previously presented) The apparatus as recited in Claim 29, wherein the management means further comprises:

means for downloading a copy of an upgrade of the second software component as
part of executing an instance of the processing means; and

means for replacing an existing version of the second software component with the
copy of the upgrade of the second software component that has been
downloaded in the same instance.

31. (currently amended) The apparatus of claim 11, wherein the processing engine employs a metadata driven interface to communicate with the network devices.
32. (cancelled)
33. (previously presented) The apparatus of claim 11, wherein a user activates the user interface via a launch applet.
34. (previously presented) The apparatus of claim 33, wherein the launch applet originates from a network device.
35. (previously presented) The apparatus of claim 17, wherein the desktop manager initializes the component manager so that the component manager can evaluate current states of the processing engine without considering any remnants from any prior instances of the processing engine.
36. (previously presented) The method of claim 1, further comprising:
determining if the software upgrades are already loaded into the component cache.
37. (previously presented) The method of claim 7, further comprising:
determining if the software upgrades are already loaded into the component cache.
38. (previously presented) The method of claim 6, wherein the replacing of the software upgrades is achieved via custom class loader mechanism.
39. (previously presented) The method of claim 1, further comprising:
determining if a specific software upgrade has already been loaded into the component cache.

40. (previously presented) The method of claim 7, further comprising:

determining if a specific software upgrade has already been loaded into the component cache.
41. (new) The method of claim 1, further comprising:

wherein the step of assessing the software dependencies and compatibilities is performed by a component manager.
42. (new) The method of claim 41, further comprising:

wherein the component manager is directly connected to the component cache, and can read from and write to the component cache.
43. (new) The method of claim 1, further comprising:

the version manager maintaining the version information of the first and second software components of the network device.
44. (new) The method of claim 43, further comprising:

the version manager requesting the version information from the network device.
45. (new) The method of claim 1, further comprising:

the version manager passing the version information to the component manager.
46. (new) The method of claim 1, further comprising:

attempting to retrieve a current copy of the version manager from the component cache;

determining that the component cache does not contain a current copy of the version manager; and

requesting and receiving a current copy of the version manager from the network device.